

## Muon $g-2$ /EDM experiment at J-PARC

*Thursday, 9 September 2021 16:30 (30 minutes)*

The muon  $g-2$ /EDM experiment at J-PARC (E34) aims to measure muon  $g-2$  and EDM with unprecedented low-emittance muon beam realized by acceleration of thermal muons.

Thanks to its low emittance, it can measure muon  $g-2$  in a completely different way than FNAL or BNL.

The technical design of the experiment has been completed and the budget is being requested to start the experiment in 2025.

In the first phase of the experiment, measurement of  $g-2$  with a precision of 0.45 ppm will be achieved through two years of data acquisition.

The measurement is statistically limited and the accuracy of 0.1 ppm will be achieved through subsequent upgrades of the beam intensity.

In this talk, details and current status of the experiment will be presented.

### Working group

WG4

**Primary author:** MASASHI, Otani (KEK)

**Presenter:** MASASHI, Otani (KEK)

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